

REMARKS

Claims 1-15 and 31-35 remain in this case.

Support for the amendments to claim 1 is found in paragraph [0020], support for the amendment to claim 2 is found at figures 1-4, while support for the amendments to claims 8 and 31 is provided by figure 4.

Office Action Rejections

Claims 1-15 are rejected under 35 USC 112 as failing to comply with the written description requirement on the basis that claim 1 was amended to state that the PV panels provide a feature other than "electricity generation".

Claim 31 is rejected under 35 U.S.C. 102(b) as being anticipated by Roderick et al. (US 4,233,085).

Claims 1, 2, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roderick et al. (US 4,233,085) in view of Brown et al. (5,885,367).

Claims 3-7, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roderick et al. (US 4,233,085) and Brown et al. (US 5,885,367) as applied to claims 1 and 8 above, in view of Berman et al. (US 4,663,085).

Claims 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roderick et al. (US Patent 4,233,085) and Brown et al. (US 5,885,367) as applied to the claim 8 above, in view of Catella et al. (US 4,611,090).

Claims 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roderick et al. (US 4,233,085) as applied to claim 31 above, and in view of Catella et al. (US 4,611,090).

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roderick

et al. (US 4,233,085) and as applied to claim 31 above, and in view of Berman et al. (US 4,663,085).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roderick et al. (US Patent 4,233,085) and Brown et al. (US 5,885,367) as applied to claim 1 above, in view of Blieden et al. (US patent 4,153,813).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roderick et al. (US Patent 4,233,085) and Brown et al. (US 5,885,367) as applied to claim 1 above, in view of McDonough et al. (US Patent 6,606,823).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roderick et al. (US Patent 4,233,085) and Brown et al. (US 5,885,367), as applied to claims 8 above, and in further view of Nath et al. (US patent 5,968,287).

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roderick et al. (US 4,233,085), as applied to claims 31 above, and in further view of Nath et al. (US 5,968,287).

The Cited Art

The **Roderick** patent discloses in figures 1 and 4 a solar panel module 10 comprising a frame 14 having side members 61 and cross members 60, 70 arranged to support an array of PV panels 20, identified as solar panels 52, 53, 54 in figure 4. The solar panels are held against frame 14 using holddown strips 16, 18, identified as holddown strips 64, 78 in figure 4. If the solar panels are adhesively affixed to the frame, a holddown strips are not needed. (6/4-14) An electrically insulating film 66-68 as applied directly to the underlying films on the solar panels 52-54 to protect against electrical shock and protect against the elements. Film 66-68 can be applied by, for example, dipping, brushing or by roller. A bituminous layer 0.002- 0.030 inch thick for film 66-68 is disclosed.

The patent to **Catella** discloses a structural support for PV modules. The embodiment of figure 5 discloses an array of 30 of support members 32. Each support member 32 includes a frame 33 having inwardly extending rib stiffeners 36 that terminate near the center at a

rectangular structure 37. Posts 43 are used to connect the support members 32 at each end of the array 32 to a base 42 at each end.

The **Brown** patent shows a foldable thin-film solar concentrator for spacecraft including a rectangular solar panel 12 and a pair of flexible, flat rectangular panels 14, one on either side of solar panel 12. Reflector panels 14 extend upwardly away from solar panels 12 so to reflect light onto the solar panel.

The Cited Art Distinguished

Independent claim 1 is not obvious over Roderick in view of Brown. Roderick does not disclose a supplemental panel as presently claimed because Roderick teaches that every panel 20 is a PV panel. (2/58-62) it would not have been obvious to add the reflector panel 14 of Brown to the structure of Roderick to arrive at the presently claimed invention because doing so would render reflective panels 14 superfluous. Therefor, claim 1 would not have been obvious over Roderick in view of Brown.

Independent claim 31 has been amended to specify the protective panel is spaced apart from substantially the entire lower surface of the PV module. In contrast, the electrically-insulating film 66-68 of Roderick contacts the entire lower surface of the PV module and is in effect a part of the PV module. The thinness (0.002- 0.030 inch thick) and the material from which the electrically insulating film 66-68 of Roderick is made (typically a bituminous material) would prevent it from being used in the manner specified in claim 31. Accordingly, claim 31 is allowable.

The **dependent claims** are direct to specific novel subfeatures of the invention and are allowable for that reason as well as by depending from novel parent claims. For example, **claim 2** recites purlins supporting the modular panels, beams located below the purlins and supporting the purlins, and generally vertical columns supporting each beam. Roderick shows no such structure. Solar panel module 10 of Roderick has a frame 14 including side members 61 and cross members 60, 70 supporting an array of solar panels 20. These elements are shown in figures 1 and 4. Solar panels 20 of figure 1 are identified as solar panels 52-54 in figure 4. Solar panels 20 are held against frame 14 using hold down strips 16, 18 in figure 1; the hold down strips of figure 1 are identified as hold down strips 64, 78 in figure 4. As stated at column 6, lines 12 -14, "If panels 14 are adhesively affixed, hold down strips 64 and 78 are not required."

Therefore, hold down strips 16, 18, 64, 68 of Roderick are not purlins supporting the modular panels. In addition, the characterization of holddown strips 18 as beams that are secured to and supporting supported by vertical columns/cross members (60, 70) is incorrect because holddown strips 18 are not secured to the frame members 60, 70 but rather are spaced apart from frame members 60, 70 and are not needed when the solar panels are adhesively secured to the frame. Further, Roderick fails to disclose or suggest the use of a generally vertical column secured to and supporting each of said beams. Accordingly, claim 2 is allowable over the cited art. **Claim 8** is allowable for the same basic reasons as independent claim 31.

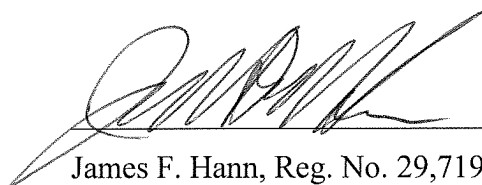
CONCLUSION

It is respectfully submitted that this application is now in condition for allowance, and such action is requested. If the Examiner believes a telephone conference would aid the prosecution of this case in any way, please call the undersigned at (650) 712-0340.

The Commissioner is hereby authorized to charge any fee determined to be due in connection with this communication, or credit any overpayment, to our Deposit Account No. 50-0869 (PWRL 1029-3).

Respectfully submitted,

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